## s18quiz: EXP LOG (QUIZ v228)
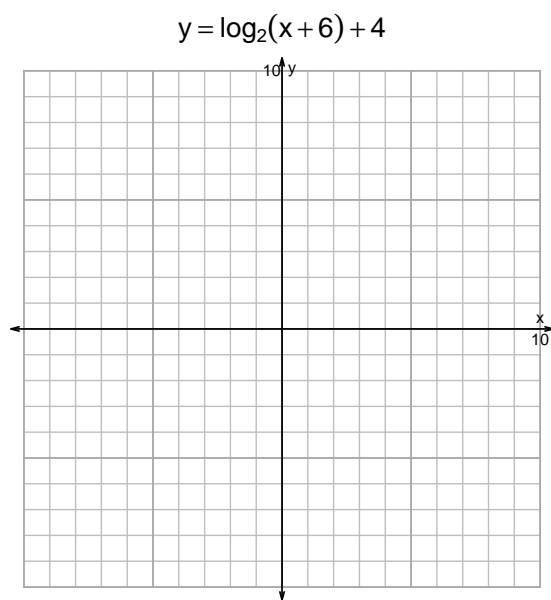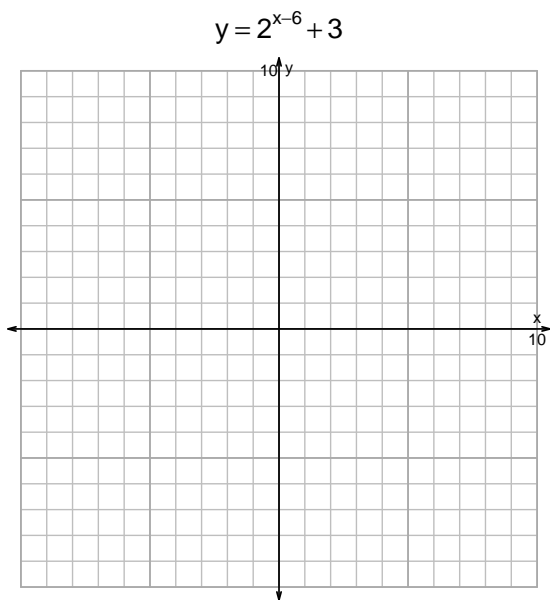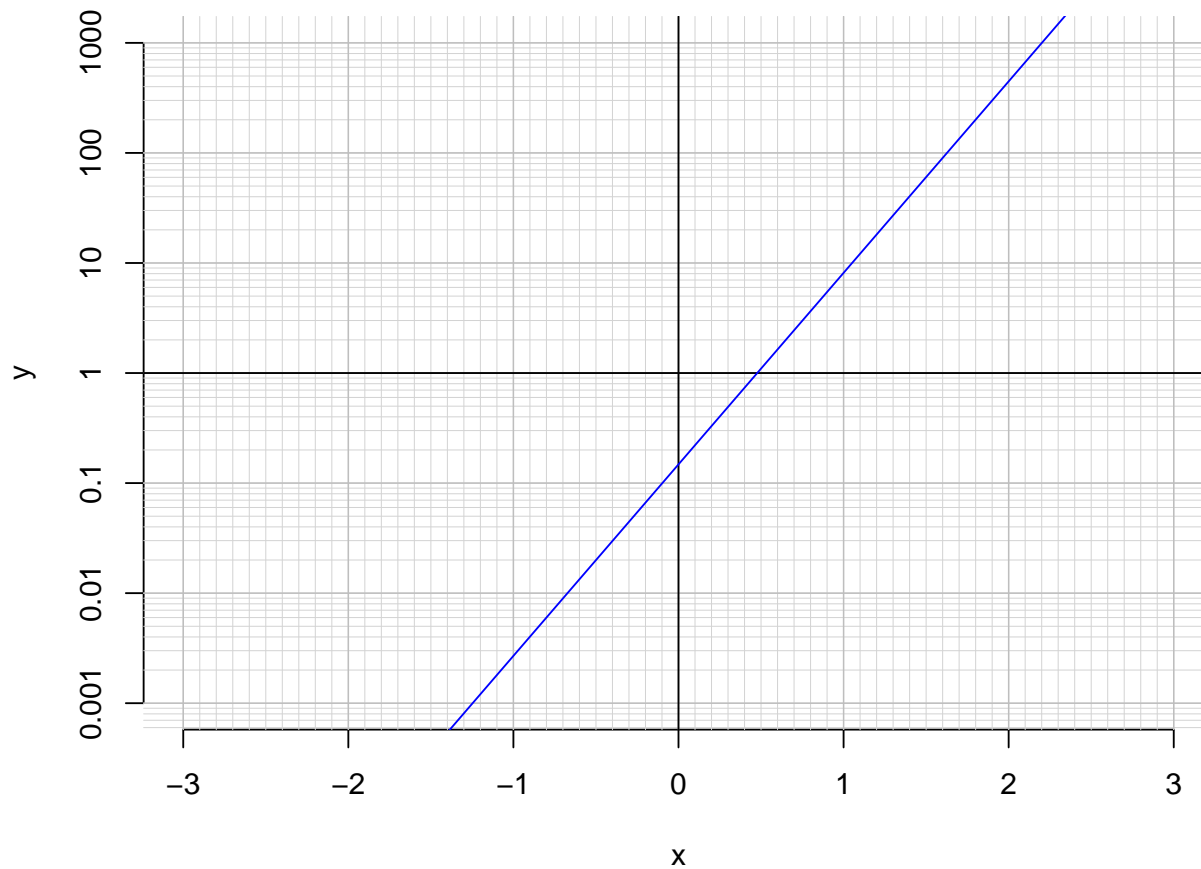
1. Graph $y = 2^{x-6} + 3$ and $y = \log_2(x+6) + 4$ on the grids below. Also, draw any asymptotes with dotted lines.

$$y = 2^{x-6} + 3$$

$$y = \log_2(x+6) + 4$$

2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$19 = \left(\frac{4}{5}\right) \cdot 10^{7t/3}$$

3. An exponential function $f(x) = 0.148 \cdot e^{4.01x}$ is graphed below on a semi-log plot.



a. Using the plot above, evaluate $f(1.6)$.

b. Express $f^{-1}(x)$, the inverse of $f$.

c. Using the plot above, evaluate $f^{-1}(0.006)$.